CLAIMS

1. A method for manufacturing a sealed monolithic electrochromic system, which method comprises the following method steps:

- application of electrolyte to a pattern of a porous structure located on a substrate, which structure constitutes at least one monolithic electrochemical cell and comprises a working electrode, an insulating layer and a counterelectrode
- application of a sealing material surrounding said porous structure to form at least one sealed monolithic electrochemical system comprising a front plane consisting of said substrate and the porous structure and a rear plane consisting of the sealing material

characterized in that the following method steps are performed after said application of electrolyte:

- said front plane and rear plane are heated and pressed together, sealing along the edge of the pattern of the porous structure being permitted by virtue of a plastic layer forming part of the sealing material being melted and joined together with said front plane.

2. The method as claimed in claim 1, characterized in that the front plane and the rear plane are pressed together by a flexible pressing tool.

3. The method as claimed in claim 1, characterized in that, in conjunction with said heating and pressing together,

- said front plane and rear plane are subjected to an underpressure, evacuation of moisture and gases from the porous structure being permitted.

4. The method as claimed in claim 1, characterized in that said front plane and rear plane are pressed together by means of a flexible diaphragm.

5. The method as claimed in claim 1, characterized in that said front plane and rear plane are placed between flexible diaphragms which together form a pocket surrounding the front plane and the rear plane, and in that said pocket is subjected to an underpressure, said pressing together of the front plane and the rear plane then taking place.

6. The method as claimed in claim 1, characterized in that the front plane and the rear plane are placed in a first chamber, where the front plane and the rear plane are subjected to an underpressure, and in that the front plane and the rear plane are pressed together.

7. The method as claimed in claim 6, characterized in that said front plane and rear plane are separated from one another by a gap, while subjected to an underpressure, for a period of time before pressing together.

8. The method according to claim 7, characterized in that the front plane and the rear plane are placed in a two-chamber system, in which a first and a second chamber are separated by a flexible diaphragm, in that at least the chamber in which the front plane and the rear plane are placed is subjected to an underpressure, and in that the front plane and the rear plane are pressed together by virtue of a positive pressure in the second chamber pressing the diaphragm against the front plane or the rear plane.

9. The method as claimed in claim 1, characterized in that said electrolyte is applied to said pattern of the porous structure by means of a printing process.

10. The method as claimed in claim 1, characterized in that said electrolyte is applied to said pattern of the porous structure by means of a dispensing process.

11. The method as claimed in claim 1, characterized in that the rear plane consists of a plastic film, and in that said rear plane and front plane are joined together by melting the plastic film and the front plane together.

12. The method as claimed in claim 1, characterized in that the substrate comprises a supporting layer made of a plastic or glass material.

13. The method as claimed in claim 1, characterized in that the rear plane comprises an adhesion ply of plastic, and also a laminate comprising at least an adhesion layer and a barrier layer, in that the adhesion ply is applied to the front plane and said laminate forming part of the rear plane is placed over said adhesion ply, and in that said front plane and rear plane are joined together to form a sealed monolithic electrochromic system by melting together the adhesion ply, the front plane and the adhesion layer.

14. The method as claimed in claim 1, characterized in that said front plane and rear plane are pressed together by a hard pressing head within an area which surrounds a grouping of electrochemical cells.

15. The method as claimed in claim 14, characterized in that said area has a minimum distance to an outer edge surrounding said grouping of cells exceeding 1 mm.

16. A sealed monolithic electrochromic system comprising a substrate supporting a pattern, located on said substrate, of a porous structure which comprises a working electrode, an insulating layer and a counterelectrode, electrolyte absorbed in said substrate for forming at least one electrochemical cell and contacts for said electrodes for interconnection with at least one electric circuit and a sealing material located on said substrate and covering said porous structure,

characterized in that the sealing material comprises an adhesion ply 19A of plastic which is applied to said substrate and porous structure 19 and a laminate 19B, 19C comprising at least an adhesion layer 19B and a barrier layer 19C, in which the adhesion layer 19B is placed over said adhesion ply 19A, and in that said substrate, porous structure and sealing material are joined together to form a sealed monolithic electrochromic system by melting the substrate, the adhesion ply 19A and the adhesion layer 19B together.

17. The sealed monolithic electrochromic system as claimed in claim 16, characterized in that said barrier layer 19C consists of a metal foil.

18. A method for producing a tight connection between a front plane consisting of an at least partly transparent substrate with a pattern of a porous structure constituting at least one monolithic electrochromic electrode and a rear plane comprising at least one ply of plastic which is intended to bear against the front plane, characterized in that

- said plane is subjected to an underpressure allowing evacuation of moisture and gases from the porous structure,
- said planes are heated and pressed together, sealing along the edge of the pattern of the porous structure being permitted.